

REMARKS

This Amendment is responsive to the Examiner Interview identified below, and is further responsive in any other manner indicated below.

EXAMINER INTERVIEW ACKNOWLEDGED

This acknowledges the Examiner Interview conducted 15 February 2005 by and between (as indicated on the Interview Summary document) assigned Examiner Jeff Piziali and attorney Paul J. Skwierawski. More particularly, any foregoing amendments may include amendments discussed during, or resultant from, the Examiner Interview, and/or the following may include a reiteration of discussions/arguments had during the Examiner Interview.

PENDING CLAIMS

Claims 1-22 were pending in the application, under consideration and subject to examination at the time of the Office Action. Unrelated to any prior art, scope or rejection, appropriate Claims have been amended, added or deleted in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, the amendments to the claims are unrelated to any prior art or scope adjustment, and are simply clarified claims in which Applicant is presently interested. At entry of this paper, Claims 1-28 are now pending in the application for consideration and examination.

§112, FIRST PARAGRAPH REJECTION-OBSOLETE VIA CLAIM AMENDMENT

The 35 USC §112, first paragraph, arguments supplied with Applicant's prior 25 January 2005 Amendment are reiterated, but slightly corrected and supplemented as follows (**see bold areas**).

Claim 1 (and Claims 2-10) and Claim 11 (and Claims 12-20) were rejected under 35 USC §112, first paragraph, for the concerns listed at Items 3 and 4 on pages 2 and 3 of the Office Action. Unrelated to any prior art, scope or rejection, appropriate amendments have been made in order to clarify Claims 1 and 11.

Additionally, Applicant's foreign representative submits the following remarks in traverse and for reconsideration of such rejection.

As to Item 3 on pages 2 and 3 of the Office Action, the Examiner states "Claims 1 and 11 are rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement." The Examiner indicates that "the light control circuit remains independent from the comparison result of data emphasis operational circuit." However, when viewing from the wiring constitution shown, e.g., in Fig. 8, Applicant respectfully submits that such characterization is inaccurate.

More particularly, Claims 1 and 11 are expressed definitely by the constitution shown in Fig. 8, which accurately illustrates that "the light control circuit controls the lighting time according to the comparison result of the new display data and the previous display data." Applicant respectfully points out that Fig. 8 shows that the light control circuit supplies the new display data from "DATA," and ~~from "FRAME MEMORY,"~~ the light control unit supplies the previous display data ~~from "FRAME~~

MEMORY. That is, in Fig. 8, in the illumination lighting controller 22, the “new display data” is supplied from “DATA” and the “previous display data” is supplied from “FRAME MEMORY 111.” The “new display data” and the “previous display data” are compared in the illumination lighting controller 22. Such facts are clearly disclosed in the wiring constitution of Fig. 8, and clearly support the features/limitations of Claims 1 and 11.

Further, such is also supported by Applicant’s originally-filed specification. More particularly, specification page 8, lines 6-9, states that with respect to a first embodiment (FIG. 1), the image data (*i.e.*, the “new display data” and the “previous display data”) is stored in a frame memory 111, and compared by the emphasis operational circuit 112. In contrast, the specification at page 14, lines 15-17, states that with respect to a second embodiment (FIG. 8), estimates are done in real time and the illumination start/on times are controlled adaptively, and “[f]or this reason, the image data is supplied to the illumination lighting controller 188 in FIG. 8.”

Added independent claim 23 (and claims dependent therefrom) also avoid any 112, first paragraph, problems, by using differing (alternative) features/limitations/language.

During the aforementioned Examiner Interview, the Examiner indicated that Applicant’s 25 January 2005 Amendment initially appeared (from the Examiner’s initial cursory review) to overcome the §112, first paragraph, rejection, but the Examiner also indicated that the Examiner could give no guarantee of the same, and further Examiner consideration was required.

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the rejection of Claims 1 and 11 under §112, first paragraph.

35 USC §112, SECOND PARA. REJECTION-TRAVERSED/IMPROPER

The arguments supplied with Applicant's prior 25 January 2005 Amendment are reiterated, but slightly corrected and supplemented as follows (**see bold areas**).

Claims 2, 3, 14 and 15 (and Claims 5, 6, 8, 9, 17 and 20) were rejected under 35 USC §112, second paragraph, for the Office Action concerns listed at Items 6-8 on pages 3 and 4 of the Office Action. Applicant respectfully traverses the rejection, and respectfully submits that the rejection is unsupported for the following reasons.

As indicated at MPEP §2173.05(b), the term "substantially" may very well be used in conjunction with another term to describe a particular characteristic of the claimed invention, and such terms are definite. As one very relevant example described in the MPEP, the Court in *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988) ruled that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal."

Likewise, Applicant respectfully submits that the term "substantially identical" in the present application also is definite, since one of ordinary skill would know what such term means in context with Claims 2, 3, 14 and 15 (and Claims 5, 6, 8, 9, 17 and 20). More particularly, given that inventors/USPTO/court recognize that it is nearly impossible (e.g., because of manufacturing tolerances, calculation limitations, etc.) to make something "identical," the word "substantially" is

very commonly used, and widely accepted, in many patented claims to account for acceptable variation.

In view of the above, Applicant respectfully submits requests reconsideration and withdrawal of the rejection under 35 USC §112, second paragraph.

REJECTION UNDER 35 USC §103 - TRAVERSED

The arguments supplied with Applicant's prior 25 January 2005 Amendment are reiterated, but slightly supplemented as follows (**see bold areas**).

The 35 USC §102 rejection of Claims 1-20 as being unpatentable over Okumura *et al.* (US 6,115,018 A) in view of Chen (US 5,592,193 A) is respectfully traversed. Such rejection has been made obsolete by the present clarifying amendments to the claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude further rejection of the claims.

All descriptions of Applicants disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated herein by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed.

As set out in the decision *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988), the court points out that the PTO has the burden under §103 to establish a *prima facie* case of obviousness, and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill

in the art would lead that individual to combine the relevant teachings of the references. However, the cited prior art does not adequately support a §103 obviousness-type rejection because it does not, at minimum, disclose (or suggest) the following limitations of Applicant's clarified claims.

More particularly, Applicant's disclosed and claimed combination invention is directed toward liquid crystal display arrangements (e.g., apparatus, methods) allowing generation/display of high quality motion pictures with less after image when displaying motion pictures, and with less fuzzy images due to equalization. Applicant found that such could be accomplished by comparing a prior image together with a present image, and then adjusting both of an LCD's illumination start/on times responsive to a result of the comparison. Accordingly, in terms of claim language, Applicant's independent Claims 1 and 11, for example, contains the features/limitations: "illumination control means for controlling an illumination start time and an illumination "on" time of each of the illumination areas of the illumination unit in response to a result of the comparison of a new display data with a previous display data." Added independent Claims 20 and 21 have similar limitations.

Added independent Claim 23 specifically recites "illumination control means for independently adjusting an instance of an illumination start time and a length of an illumination "on" time of each of the illumination areas of the illumination unit in response to real-time analysis of the new display data together with the previous display data. Added dependent Claims 25-28 add similar features limitations to independent Claims 1, 11, 21 and 22, respectively.

Regarding rebuttal of the applied art, Okumura *et al.* (US 6,115,018 A) is directed to an active matrix liquid crystal display device arrangement, wherein a differing (voltage) type of adjustment appears to be conducted, and in a differing way (from Applicant's claimed invention). More particularly, Okumura *et al.*'s Column 3, lines 41-46, states, “[w]ith the above arrangement, for a motion image with a change in pixel potential, a voltage to be applied to the liquid crystal can be corrected in advance to emphasize the change without using any frame memory or field memory so that high-quality display with an improved after-image characteristic can be realized.” First, it is respectfully noted that Okumura *et al.* is correcting “voltage,” as opposed to Applicant's “start/on times.” In fact, Okumura *et al.*'s Column 8, lines 7 and 8, clearly states that correction is done at “arbitrary timing.” Second, given that Okumura *et al.*'s arrangement does not use any frame memory or field memory, there appears to be no comparison within Okumura et al. with any “prior image data” (i.e., there would be nothing to store the prior image data). Clearly, Okumura *et al.* teaches away from Applicant's disclosed and claimed invention.

Chen (US 5,592,193 A) is directed to a backlighting arrangement for an LCD display panel realizing improved efficiencies. In order to accomplish the same, the Chen arrangement utilizes a plurality of lights along the backlighting arrangement, and actuates each of the light sources in a sequential manner synchronously (e.g., from top to bottom) for illuminating only that portion of the display panel providing a video image at a given time (see sequence of Chen's FIGS. 4-6). Chen (like Okumura *et al.*) nowhere discloses any comparing of a prior image together with a

present image, and then adjusting both of an LCD's illumination start/on times responsive to a result of the comparison.

Given that neither reference discloses any image comparing or start/on time adjustment responsive to comparison, it is respectfully submitted that the applied references, whether taken respectively alone, or taken in combination, would not have disclosed or suggested Applicant's invention.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant's claims.

As to Item 10 on pages 4-9 of the Office Action, Applicant respectfully submits that, regarding clarified Claims 1 and 11, the invention defined clearly has a constitution which is "the illumination control means for controlling an illumination start time and an illumination "on" time of each of the illumination areas of the illumination unit in response to a result of the comparison of a new display data with a previous display data." Any one of the references to Okumura *et al.* and Chen does not disclose the above stated constitution (the essential features) of the present invention, such as in Claims 1 and 11, e.g., "the illumination control means for controlling an illumination start time and an illumination "on" time of each of the illumination areas of the illumination unit in response to a result of the comparison of a new display data with a previous display data." Even if the invention of Okumura *et al.* could be combined with the invention of Chen, it does not have the same constitution defined in Claims 1 and 11 of the present invention. As well, the references to Okumura *et al.* and Chen also do not disclose that the "illumination

lighting controller" has the constitution in which the above discussed comparison is carried out (performed).

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a §103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §103 rejection, and express written allowance of all of the rejected claims, are respectfully requested.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer of any scope or subject matter. Further, Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, *i.e.*, Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

EXAMINER INVITED TO TELEPHONE

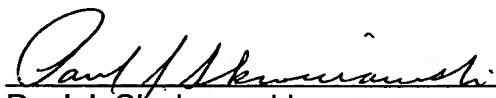
The Examiner is invited to telephone the undersigned at the local D.C. area number 703-312-6600, to discuss an Examiner's Amendment or other suggested action for accelerating prosecution and moving the present application to allowance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

This Amendment is being filed without any imposed shortened statutory period for response, and therefore, no Petition or extension fee is believed required. To whatever other extent is actually required, Applicant respectfully petitions the Commissioner for an extension of time under 37 CFR §1.136. A Form PTO-2038 is attached which authorizes the additional claims fees required for entry of this paper. Please charge any actual deficiency in fees to ATS&K Deposit Account No. 01-2135 (as Case No. 503.39221CX1).

Respectfully submitted,



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Attachment:
PTO-2038 (Fee Codes 1201/1202)